

Attorney's Docket No.: 06501-092001 / D1-A0009-US

GAU 1633  
#8  
9/4/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Hiroaki Yamamoto et al.  
Serial No. : 10/020,674  
Filed : October 30, 2001  
Title : NOVEL (R)-2,3-BUTANEDIOL DEHYDROGENASE

Art Unit : 1633  
Examiner : Unknown

RECEIVED

AUG 27 2002

TECH CENTER 1600/2900

U.S. Patent and Trademark Office  
Arlington, VA 22202

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449, copies of which are enclosed. A copy of a communication from a foreign patent office in a counterpart application is also enclosed.

U.S. Patent Application No. 10/147,003 ('003), listed on the attached PTO-1449 form, shares at least one common inventor (Hiroaki Yamamoto) with the present application. In addition, the present application and the '003 application are both assigned to the Daicel Chemical Industries, Ltd., a Japanese corporation having a place of business at:

1 Teppo-cho, Sakai-shi, Osaka 590-8501 JAPAN.

The following reference was previously submitted and is not being submitted herewith:

Heidlas et al., "Purification and characterization of a (R)-2,3-butanediol dehydrogenase from *Saccharomyces cerevisiae*", Arch. of Microbiol., 154:267-273, 1990

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202.

August 23, 2002  
Date of Deposit

Lucille M. Begalla  
Signature

Lucille M. Begalla  
Typed or Printed Name of Person Signing Certificate

Applicant : Hiroaki Yamamoto et al.  
Serial No. : 10/020,674  
Filed : October 30, 2001  
Page : 2


Attorney's Docket No.: 06501-092001 / D1-A0009-US

This statement is being filed before the receipt of a first Office action on the merits.

Please apply any charges or credits to Deposit Account No. 06-1050.

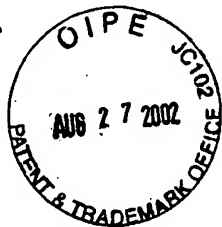
Respectfully submitted,

Date: 8/23/02

 (45647) for  
Janis K. Fraser, Ph.D., J.D.  
Reg. No. 34,819

Fish & Richardson P.C.  
4350 La Jolla Village Drive, Suite 500  
San Diego, California 92122  
Telephone: (858) 678-5070  
Facsimile: (858) 678-5099

10206883.doc



INVESTOR IN PEOPLE

Daicel Chemical Industries Ltd  
% Mathys & Squire  
100 Grays Inn Road  
LONDON  
WC1X 8AL

**The Patent Office  
Patents Directorate**

Concept House  
Cardiff Road, Newport  
South Wales NP10 8QQ

Examiner: 01633 813794  
E-mail: [jeremy.kaye@patent.gov.uk](mailto:jeremy.kaye@patent.gov.uk)  
Switchboard: 01633 814000  
Fax: 01633 814444  
Minicom: 08459 222250  
DX 722540/41 Cleppa Park 3  
<http://www.patent.gov.uk>

Your Reference: SDR/24020  
Application No: GB 0126119.7

1 July 2002

Dear Sirs

**Patents Act 1977: Search Report under Section 17(5)**

I enclose two copies of my search report and a copy of the citations.

**Publication**

I estimate that, provided you have met all formal requirements, preparations for publication of your application will be completed soon after **25 March 2003**. You will then receive a letter informing you of completion and telling you the publication number and date of publication.

**Amendment/withdrawal**

If you wish to file amended claims for inclusion with the published application, or to withdraw the application to prevent publication, you must do so before the preparations for publication are completed. **No reminder will be issued.** If you write to the Office less than 3 weeks before the above completion date, please mark your letter prominently: **"URGENT - PUBLICATION IMMINENT"**.

Yours faithfully

Dr Jeremy Kaye  
Examiner

**RECEIVED**

**AUG 29 2002**

**TECH CENTER 1600/2900**

<sup>†</sup>Use of E-mail: Please note that e-mail should be used for correspondence only.



INVESTOR IN PEOPLE

Application No: GB 0126119.7  
Claims searched: 1-18

Examiner: Dr Jeremy Kaye  
Date of search: 28 June 2002

## Patents Act 1977 Search Report under Section 17

### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.T):

Int Cl (Ed.7):

Other: Online: EPODOC, WPI, PAJ, BIOSIS, CAPLUS, EMBASE, MEDLINE, SCISEARCH, BLASTp, BLASTn

### Documents considered to be relevant:

| Category | Identity of document and relevant passage   | Relevant to claims |
|----------|---|--------------------|
| A        | WO 99/54453 A1 (CHR. HANSEN A/S) p.3, 1.20 - p.5, 1.30  |                    |
| Y        | Gene, Vol.197, 1997, Smania, A. M. et al., "Molecular cloning and characterization...", pp.231-238.   | 6-18               |
| X, Y     | Arch. Microbiology, Vol.154, 1990, Heidlas, J. et al., "Purification and characterization of a (R)-2,3-butanediol dehydrogenase...", pp.267-273 | X: 1-5<br>Y: 6-18  |

X Document indicating lack of novelty or inventive step  
Y Document indicating lack of inventive step if combined with one or more other documents of same category.  
& Member of the same patent family

A Document indicating technological background and/or state of the art.  
P Document published on or after the declared priority date but before the filing date of this invention.  
E Patent document published on or after, but with priority date earlier than, the filing date of this application.